

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/704,595	AKKERMANS, ANTONIUS H.M.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jorge L Ortiz-Criado	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to:
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

**Applicant's response of 12/06/2004 has been considered with the following results.**

### *Specification*

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claims 1, 3, 9 and 15 recites the limitation terminology of “a predetermined period of time”, “a predetermined time interval”, “a predetermined time period”, “ a predetermined time period”, respectively; Claims 15, recites the limitations, “apparatus for employing”, “a read system”, “a motion control device”. Claim 16 recites the limitation “a measuring device”. Claim 19, recites “ a tangential first rotation”. These terms terminology **cannot** be found in the specification.

The terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. There is insufficient antecedent basis for this limitation in the specification.

While an applicant is not limited to the nomenclature used in the application as filed, he or she should make appropriate amendment of the specification whenever this nomenclature is departed from by amendment of the claims so as to have clear support or antecedent basis in the

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specification for the new terms appearing in the claims. This is necessary in order to insure certainty in construing the claims in the **light of the specification**, *Ex parte Kotler, 1901 C.D. 62, 95 O.G. 2684 (Comm'r Pat. 1901)*. See 37 CFR 1.75, MPEP § 608.01(i) and § 1302.01.

If the examiner determines that the claims presented late in prosecution do not comply with 37 CFR 1.75(d) (1), *applicants* will be required to make appropriate amendment to the description to provide clear support or antecedent basis for the terms appearing in the claims provided NO new matter is introduced.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the time" in the second line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 18, recites the limitation "the sampled measurement signal" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

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**As far as the claims recite positive limitations, the following art rejections are made.**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1-5,7-11,13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Gérard et al. U.S. Patent No. 4,561,082.

Regarding claim 1, Gérard discloses a device, for reading and or writing information from/onto an optical information carrier, said information stored in the form of differences in intensity level (See col. 1, lines 39-43), said device comprising:

-read means including imaging means for imaging a radiation beam so as to form a scanning spot by means of which the information carrier is scanned, and including detection means for generating a read signal, which is indicative of the intensity of the radiation reflected from the information carrier at the location of the scanning spot (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10),

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-which device has an information transfer mode, in which the scanning spot is moved in a first direction with respect to the information carrier (col. 6, lines 10-16),

-which device has a displacement mode, in which the scanning spot is moved in a second direction transverse to the first direction (col. 5, lines 49-65)(col. 6, lines 21-25),

-control means for controlling the imaging means in response to a measurement signal which is indicative of the degree of focusing of the radiation beam at the location of scanning spot, which control means include sample and hold means for sampling and holding the measurement signal in response to a sample signal (col. 2, lines 39-56)(col. 3, lines 14-68)(col. 5, lines 47-65) (col. 6, lines 21-25)(col. 8, lines 41-67 to col. 9, lines 1-27)(col. 11, lines 33-63) (See Figs. 1,2, 3, 4, 5, 10)

-wherein the sample signal causes the measurement signal to be sampled at locations having mutually the same intensity level "will be measured" within predetermined period of time (See col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 2, 3, 4, 5).

Regarding claim 3, Gérard discloses a device for reading and recording information on an optical information carrier, said information carrier having information stored therewithin as patterns formed by differences in intensity levels (See col. 1, lines 39-43; col. 7, lines 8-16; Figs. 1,2,3,4,5,6,9,10), said device comprising:

a read system adapted to read data from said optical information carrier, said read system further comprising a radiation beam source, a radiation beam, a device for focusing said radiation beam, a scanning spot formed with said focused radiation beam and proximate said optical information carrier, said scanning spot having an intensity (col. 1, lines 9-15, lines 36-43; col. 2,

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lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10),

a motion control device for controlling movement of said scanning spot relative to said optical information carrier (col. 6, lines 10-16),

and for generating a read signal (SLS) which is indicative of the intensity of the radiation reflected from the information carrier at the location of the scanning spot, said read system further adapted to derive, from said optical information carrier via said scanning spot, a measurement signal, a radial error signal, and an information signal (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10);

and a signal generation system operatively coupled to said read system, said signal generation system adapted to produce a sample signal to control sampling of said measurement signal, said sample signal proportional to the intensity of said scanning spot, and wherein said sample signal causes the measurement signal to be sampled at locations having mutually the same intensity level, and within a predetermined time period (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10);

Regarding claim 2, Gérard et al. discloses wherein the sample signal is responsive to the time during which the measurement signal is held causing the measurement signal to be sampled when the time exceeds a predetermined value.

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Regarding claim 9, Gérard discloses a method of reading information stored on an optical information carrier (See col. 1, lines 39-43; col. 7, lines 8-16; Figs. 1,2,3,4,5,6,9,10), said method comprising:

providing an optical information carrier (See col. 1, lines 39-43; col. 7, lines 8-16; Figs. 1,2,3,4,5,6,9,10),

said optical information carrier having a multilevel structure, and said optical information carrier bearing data recorded as patterns formed in the information carrier by differences in intensity levels (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

providing a read system adapted to read data from said optical information carrier, said read system further comprising a radiation beam source, a radiation beam, a device for focusing said radiation beam, a scanning spot formed with said focused radiation beam and proximate said optical information carrier, said scanning spot having an intensity (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10),

a motion control device for controlling movement of said scanning spot relative to said optical information carrier (col. 6, lines 10-16),

and for generating a read signal (SLS) which is indicative of the intensity of the radiation reflected from the information carrier at the location of the scanning spot, said read system further adapted to derive, from said optical information carrier via said scanning spot, a measurement signal, a radial error signal, and an information signal; and providing a signal generation system operatively coupled to said read system (See col. 1, lines 9-15, lines 36-43;

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col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

said signal generation system adapted to produce a sample signal to control sampling of said measurement signal, said sample signal proportional to the intensity of said scanning spot, and wherein said sample signal causes the measurement signal to be sampled at locations having mutually the same intensity level and within a predetermined time period (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

Regarding claims 4 and 10, Gérard discloses wherein said intensity of said scanning spot is an indicator of a location of the scanning spot with respect to the patterns provided in the information carrier (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 8, lines 41-67 to col 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10);

Regarding claims 5 and 11, Gérard discloses wherein said sample signal causes the measurement signal to be sampled at instants when said intensity is comparatively high and a periodic clock signal is received by said signal generation system (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).



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Regarding claim 7 and 13, Gérard discloses wherein said read system is adapted to operate in two operational modes:

an information transfer mode wherein said motion control device provides motion of said scanning spot in a tangential first direction with respect to an axis about which said information carrier is rotated (See col. 6, lines 10-16; Figs. 6, 7);

and a displacement mode wherein said motion control device provides motion of said scanning spot in a radial second direction, wherein said radial transverse direction is transverse to said first direction (See col. 5, lines 49-65; col. 6, lines 21-25; Figs. 6, 7).

Regarding claim 8, Gérard discloses wherein said read system further comprises a system for generating a logic signal which indicates that information is recorded on the information carrier in the form of differences in level of a surface of the information carrier (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

Regarding claim 14, Gérard discloses wherein said sampling of the measurement signal when said intensity is comparatively high results in a reduction of radial-to-vertical crosstalk (See col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63)

***Claim Rejections - 35 USC § 103***

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 15-20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gérard et al. U.S. Patent No. 4,561,082 in view of Nakano JP No. 09-3200070.

Regarding claim 15, Gérard et al. discloses an apparatus for employing an optical information carrier (See col. 1, lines 39-43; col. 7, lines 8-16; Figs. 1,2,3,4,5,6,9,10), said apparatus comprising:

device for reading and recording information on said optical information carrier, said information carrier having information stored therewithin as patterns formed by differences in levels (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10),

a read system adapted to read data from said optical information carrier, said read system further comprising a radiation beam source, a radiation beam, a device for focusing said radiation beam, a scanning spot formed with said focused radiation beam and proximate said optical information carrier, said scanning spot having an intensity (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10),

a motion control device for controlling movement of said scanning spot relative to said optical information carrier (col. 6, lines 10-16),

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and a device for deriving, from said optical information carrier via said scanning spot, a measurement signal, a radial error signal, and an information signal (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

said signal generation system operatively coupled to said read system, said signal generation system adapted to produce a sample signal to control sampling of said measurement signal, said sample signal proportional to the intensity of said scanning spot, and wherein said sample signal causes the measurement signal to be sampled when said intensity is comparatively high (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

Gérard et al. discloses that the measurement signal is sampled when said intensity is comparatively high and within a predetermined time intervals, but does not expressly disclose wherein if the measurement signal is not sampled within a predetermined time period then said sampled signal causes the measurement signal to be sampled.

However, this feature is well known in the art and is evidenced by Nakano, which discloses an apparatus for employing an optical information carrier, which discloses a signal generation system operatively coupled to a read system, said signal generation system adapted to produce a sample signal to control sampling of a measurement signal, and wherein said sample signal causes the measurement signal to be sampled every predetermined time period (See abstract, detailed description [0004-[0016])

It would have been obvious to one with an ordinary skill in the art at the time of the invention to sample the measurement signal, as well established and well known, every predetermined

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period of time, in order to control avoid instabilities, such as vibrations of the focus actuator, as taught by Nakano.

Regarding claim 16, the combination as outlined above would show wherein the predetermined time period determined by a measuring device that is reset after said sampling of the measurement signal (See Nakano time period)

Regarding claim 17, the combination as outlined above would show wherein the measurement signal is held if said intensity is not comparatively high (See Gérard et al. col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

Regarding claim 18, the combination as outlined above would show wherein the sampled measurement signal is employed to control focusing of said radiation beam (See Gérard et al. col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

Regarding claim 19, the combination as outlined above would show wherein said read system is adapted to operate in at least two operational modes including:

an information transfer mode wherein said motion control device provides motion of said scanning spot in tangential first direction with respect to an axis about which said information carrier is rotated; (See Gérard et al. col. 6, lines 10-16; Figs. 6, 7)

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a displacement mode wherein said motion control device provides motion of said scanning spot in a radial second direction, wherein said radial transverse direction is traverse to said first direction (See Gérard et al. col. 5, lines 49-65; col. 6, lines 21-25; Figs. 6, 7).

Regarding claim 20, the combination as outlined above would show wherein the measurement signal sampled when said intensity is comparatively high is indicative of the lactation of the scanning spot patterns on the optical information carrier (See Gérard et al. (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

#### *Allowable Subject Matter*

6. Claims 6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Response to Arguments*

Applicant's arguments filed 12/06/2004 have been fully considered but they are not persuasive.

In regard to claim 1, Applicant argues that there is no mention in Gérard et al. of measuring sampled the measurement signal within a predetermined period of time.

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The Examiner cannot concur because Gérard et al. clearly sample the measurement signal within a predetermined period of time. Gérard et al. discloses a **clock** signal, and which the measurement signal is sampled at locations having mutually the same intensity level, and within a predetermined **clock** time periods. Every **clock time period/interval/** AND at the same intensity level the measurement signal is sampled.

Office personnel are to give claims their **broadest reasonable interpretation** in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. > E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily).< In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)

Applicant's arguments with respect to claim 2 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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DAVID L. OMETZ  
PRIMARY EXAMINER